

L 7734-66 EWT(1)/ETC/EPF(n)-2/ENG(m)/EPA(w)-2/EWA(m)-2 [JFF(?)] AT
ACC NR: AP5025909 SOURCE CODE: UR/0037/05/035/010/1907/1909

AUTHOR: ^{44, 55} Kagan, Yu.M.; ^{44, 55} Milenin, V.M.

ORG: Leningrad State University im. A.A.Zhdanov (Leningradskiy gosudarstvennyy universitet) ^{44, 55}

TITLE: On the radial dependence of the electron velocity distribution in the positive column of a discharge

SOURCE: Zhurnal tekhnicheskoy fiziki, v. 35, no. 10, 1963, 1907-1909

TOPIC TAGS: ^{21, 44, 55} gas discharge plasma, positive column, helium, neon, ^{21, 44, 55} electron distribution, Maxwell distribution, distribution function

ABSTRACT: The electron velocity distribution functions were measured on and off the axes of the 2.5 cm diameter positive columns of 150 to 500 mA discharges in He at 0.25 to 1.5 mm Hg and 100 mA discharges in He at 0.2 to 1.2 mm Hg. Four 6 mm long 0.06 mm diameter probes were employed, two being mounted 50 mm apart on the axis of the column and two at corresponding positions 9 mm off the axis. The longitudinal electric field strength measured with these probes was the same on and off the axis. The electron velocity distributions on and off the axis were derived from the second derivatives of the corresponding probe characteristics. At the lowest pressures the distributions were nearly Maxwellian and were the same on and off the axis. At higher pressures there were relatively more low energy electrons and fewer high energy electrons off

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the axis. The difference between the on and off axis distribution functions increased with increasing pressure. Measurements could not be obtained at higher pressures because of increasing noise. The difference between the average electron energy on and off the axis was not great and almost did not exceed the experimental error. The observed difference between the electron distributions on and off the axis is in agreement with a theory previously proposed by Yu. M. Kagan and R. I. Lyagushenko (ZhTF, XXXIV, 821, 1873, 1964). Orig. art. has: 1 formula and 2 figures.

SUB CODE: ME/ SUBM DATE: 08Apr65/ ORIG REF: 005/ OTH REF: 000

Card

2/2

L 10671-66 EWT(1)/EPF(n)-2/EWA(m)-2 LJP(c) NW/AT

ACC NR: AP5028323

SSOURCE CODE: UR/0057/65/035/011/2059/2075

AUTHOR: Kagan, Yu. M.; Perel', V.I.

ORG: Leningrad State University im. A.A.Zhdanov (Leningradskiy gosudarstvennyy universitet)

TITLE: on the theory of a spherical probe at medium and high pressure

SOURCE: Zhurnal tekhnicheskoy fiziki, v. 35, no. 11, 1959, 2089-2075

TOPIC TAGS: plasma diagnostics, plasma probe, pressure effect, electron temperature, spheric geometry

ABSTRACT: The electron current to a spherical probe at a negative potential is calculated directly from the kinetic equation by methods previously employed by the authors (ZhTF 24, 889, 1954) to calculate the electron current to a spherical probe held at the space potential. The result reduces to the usual formula when the pressure is low, but the kinetic treatment is necessary at high pressures because the diffusion equations are invalid, owing to the low energy transfer in collisions between electrons and atoms. To facilitate the approximate solution of the kinetic equation, the distribution function is expressed as the sum of two terms representing electrons moving in different directions. This procedure is shown to give the correct result in the limiting case of low pressures and to provide a very good approximation in the limiting case of high pressures; it is assumed, therefore, that

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ACC NR: AP5028323

the procedure will give a good approximation also at intermediate pressures. It is found that the electron current to the probe increases less rapidly than exponentially as the probe potential approaches the space potential and that the deviation from exponential rise is the greater, the higher the pressure. The usual method of determining the electron temperature from the slope of the upper part of the logarithmic probe characteristic, therefore, overestimates the temperature. The expression derived for the probe current can be evaluated only when the velocity dependence of the electron mean free path is known. Probe characteristics were calculated with the assumption that the electron mean free path is proportional to v^s (v is the electron velocity) for four different values of the constant s between 1 and -2, and the characteristics are presented graphically. When the electron temperature is determined from the derivative of the probe characteristic in the manner proposed by Yu.M.Kagan, V.I.Perel', and P.O.Pipatti (Vestnik LGU, No.8,129,1955), the relative error is $(s + 2)kT_e/2eV$ at high pressures, where k is Boltzmann's constant, T_e is the electron temperature, e is the electron charge, and V is the probe potential. At lower pressures the error is smaller. Orig. art. has: 31 formulas and 1 figure

SUB CODE: 20 SUBM DATE: 13Apr65/

ORIG. REF: 006

OTH REF:004

Card

2/2

ACC NR: AD 7001326

SOURCE CODE: UR/0057/66/036/012/2219/2220

AUTHOR: Kagan, Yu.M.; Milenin, V.M.; Mitrofanov, N.K.

ORG: Leningrad State University im. A.A. Zhdanov (Leningradskiy gosudarstvennyy universitet)

TITLE: On the energy distribution of electrons in the positive column of an argon discharge

SOURCE: Zhurnal tekhnicheskoy fiziki, v. 36, no. 12, 1966, 2219-2220

TCPIC TAGS: gas discharge plasma, positive column, argon, electron distribution, Maxwell distribution

ABSTRACT: In a paper shortly to appear in the Zhurnal tekhnicheskoy fiziki, the authors describe a technique for measuring the energy distribution of electrons in plasmas in the presence of a large noise background. In the present letter to the editor they present electron distributions recorded with this technique in the positive column of an argon discharge in a 2.3 cm diameter tube at pressures from 0.03 to 4.5 mm Hg and currents from 100 to 300 mA. At low pressures the electron distributions were Maxwellian. At higher pressures there were more low energy and fewer high energy electrons than in the corresponding Maxwell distribution. At 3 and 4.5 mm

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L 21759-66 EMT(1)/EMT(m)/ETC(f)/EPE(n)=2/ENG(m)/T/ IJP(c) AT/DS
ACC NR: AP6004896 SOURCE CODE: UR/0057/66/036/001/0181/0185

AUTHOR: Borodin, V.S.; Kagan, Yu.M.

ORG: Leningrad State University im. A.A.Zhdanov (Leningradskiy gosuniversitet)

TITLE: Investigation of the discharge in a hollow cathode. 1. Comparison of the electrical characteristics of a hollow cathode and a positive column

SOURCE: Zhurnal tekhnicheskoy fiziki, v. 36, no. 1, 1966, 181-185

TOPIC TAGS: gas discharge, helium, positive column, hollow cathode, electron distribution, velocity distribution, Maxwell distribution, electrode, electron energy

ABSTRACT: The authors have measured the electron density and velocity distribution in helium discharge positive columns and in hollow cathode helium discharges, using the technique previously employed by N.A.Vorob'yeva, Yu.M.Kagan, R.I.Lyagushchenko, and V.M.Milenin (ZhTF, 34, 146, 1964) to measure electron velocity distributions in positive columns. Two hollow cathodes with diameters of 2 and 1 cm and lengths of 5 and 10 cm, respectively, were investigated. The electron density and velocity distribution at the center of the hollow cathode and on the axis of a positive column of equal diameter were derived from the probe characteristics of 0.05 mm diameter 5 mm long cylindrical probes. Measurements were made at helium pressures from 0.9 to 3.5 mm Hg and discharge currents from 20 to 40 mA. Deviations from the Maxwellian distribution were

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observed at the higher pressures; in the hollow cathode there was an excess of high energy electrons, and in the positive column there was a deficiency of high energy electrons. The number of high energy electrons in the hollow cathode was maximum at a certain optimum pressure that was higher for the smaller cathode than for the larger one. The ratio of the number of electrons with energies from 0 to 13 eV to the number with energies from 19 to 26 eV was nearly independent of pressure for the hollow cathode and was small and exhibited a minimum as a function of pressure for the positive column. The significance of these results for the interpretation of the spectra of the discharges is discussed briefly. Orig. art. has: 3 formulas, 9 figures, and 1 table.

SUB CODE: 20/

SUBM DATE: 14May65/

ORIG REF: 004/

OTH REF: 000

Card 2/2 *U/R*

L 31503-66 EWT(1)/ETC(f) IJP(c) AT
ACC NR: AP6013018

SOURCE CODE: UR/0051/66/020/004/0561/0567

AUTHOR: Golubovskiy, Yu. B.; Kagan, Yu. M.; Lyagushchenko, R. I.

68

ORG: none

8

TITLE: Spectroscopic and probe investigation of a pinched discharge column. I.

SOURCE: Optika i spektroskopiya, v. 20, no. 4, 1966, 561-567

TOPIC TAGS: plasma pinch, positive column, discharge plasma, electron density, electron temperature, neon, argon

ABSTRACT: For the purpose of checking on the theory proposed by the authors to explain the contraction of the positive column of a discharge, wherein the glowing region does not fill the entire volume of the tube but is concentrated about the axis (ZhTF v. 34, 1873, 1964), the authors have measured the electron density distribution over the cross section of a discharge tube, the electron temperatures, the longitudinal fields, and the currents to the wall, in the case of discharges in neon and argon under different conditions. In the case of neon the pressures ranged from 1 to 30 mm Hg and the current from 50 to 400 ma. In argon the corresponding figures were 0.5 - 10 mm Hg and 25 - 400 ma. The electron density n_e , the electron temperature T_e , and the longitudinal field intensity E were measured by

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Card 4/4

L 02281-67 EWT(1)/T IJP(c) AT

ACC NR: AP6025243

SOURCE CODE: UR/0057/66/036/007/1198/1201

AUTHOR: Borodin, V.S.; Kagan, Yu.M.; Lyagushchenko, R.I.

ORG: none

TITLE: Investigation of a hollow cathode discharge. 2.

SOURCE: Zhurnal tekhnicheskoy fiziki, v. 36, no. 7, 1198-1201

TOPIC TAGS: gas discharge, hollow cathode, electric field, electron energy, electron distribution

ABSTRACT: This paper is a sequel to an earlier paper by V.S. Borodin and Yu.M. Kagan (ZhTF, 36, 181, 1966) in which the experimental techniques were described and the earlier results presented. The previous work showed that the electron energy distribution in a hollow cathode differs from that in a positive column in that its maximum occurs at a lower electron energy and it falls off less rapidly with increasing energy. Probe measurements in a 10 cm long 2 cm diameter hollow cathode have now shown, in agreement with the findings of E. Badareu and I. Popescu (Phys. Rev., 5, No. 1, 1960 /Abstractor's note: the reference appears to be to Rev. de Physique, Bucharest 7), that the electric field within a hollow cathode is very weak. Measurements of the electron energy distribution within the hollow cathode were extended beyond the previous upper limit of 40 eV to some hundreds of eV with the aid of a two-grid electrostatic analyzer.

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ACC NR: AP6025243

It was found that the electron energy distribution in a hollow cathode is close to the energy of the cathode drop (several hundred eV in the present experiments). A simple kinetic calculation in which excitation and stepwise ionization were neglected and it was assumed that electrons of energy corresponding to the cathode drop appear at a uniform rate throughout the volume within the hollow cathode gave a theoretical electron energy distribution that is in qualitative agreement with the distribution observed near the wall of the cathode. The electron energy distribution observed at the center of the hollow cathode differed from the theoretical distribution in having a sharper maximum and fewer fast electrons. Orig. art. has: 5 formulas and 5 figures.

SUB CODE: 20

SUBM DATE: 03 Jul 65

ORIG. REF: 002 OTH REF: 002

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...as in part I, but the windows on the ends. The radial intensity distribution was investigated in neon in the lines 6929, 6506, 5764, and 5330 Å, and in argon in the lines 7503, 4300, 4259, 6871, 5883, and 5187 Å. The line intensity was corrected for reabsorption in the usual manner. The experiment has shown that the radial dependence of the different line intensities agreed within the limits of error.

ACC NR: AP7000022

resulted in contraction of the pinch. The experimental results are found to agree with theoretical calculations of the light flux distribution with allowance for the finite dimensions of the monochromator slit and other factors. Orig. art. has: 12 figures and 3 formulas.

SUB CODE: 20/ SUBM DATE: 27Jan65/ ORIG REF: 003

Card 2/2

KAGAN, YU. S.

CHERKES, A.I.; GORODINSKAYA, V.Ya.; KAGAN, Yu.S.

Pharmacology of sulfanilamides. Vop. fiziol. no.5:100-112 '53.

(MLRA 8:1)

1. Kiyevskiy meditsinskiy institut, kafedra farmakologii.
(SULFANILAMIDE,
pharmacol.)

BOGUSHEVSKIY, S.M.; KAGAN, Yu.S.

Certain problems of work hygiene in mechanized cultivation of cotton. Gig. i
san. no.11:19-21 N '53. (MLBA 6:10)

1. Kiyevskiy institut gigiyeny truda i professional'nykh zabolevaniy.
(Industrial hygiene) (Cotton growing and manufacture)

USSR.

The effect of vitamin B₁₂ on the biochemical transformations of sulfonamides in the animal organism. Yu. S. Kagan. *Voprasy Fiziol.* 1953, No. 6, 130-31; *Russkaya Akad. Med. Nauk.* 1954, No. 21883. — Into the stomach of healthy rabbits was introduced a suspension of sulfanilamide (I) or sulfapyridine, followed by detn. of free and acetylated forms of I in the blood. Simultaneous addn. of vitamin B₁₂ (II) in some instances increased the amt. of acetylated I in the blood; on prolonged (7-31 days) admin. of II, the amt. of the acetylated I increased markedly. This effect was most pronounced in the case of ani. subj. possessing some degree of hypovitaminosis. The application of II for prophylaxis and cure of the neurotoxic complications resulting from sulfonamide therapy is suggested. E. Wierzbicki.

Chem Pharmacology. Kiev Med. Inst.

USSR/Pharmacology and Toxicology - Toxicology.

V-9

Abs Jour : Ref Zhur - Biol., No 21, 1958, 93628

Author : Kagan, Yu.S., Shleyfman, F.M.

Inst : -

Title : Change of Condition of the Olfactory Analyzer as One of the Indicators of a Poison and Dust Effect on the Human Organism.

Orig Pub : V sb.: Vopr. fiziologii truda, Kiev, Medgiz USSR, 1955, 149-155.

Abstract : By investigation of the condition of the olfactory analyzer in workers after 5 days of work in field which had been treated with sodium arsenite (concentration of its in the respiratory zone 0.0007 mg/l and up), lowering of threshold of sensitivity (TS) and differentiation of the smell of ethyl alcohol, phenol and acetic acid were noted. In workers at a sodium arsenate warehouse (qualification 1.5-20 years), increase of TS was established.

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"APPROVED FOR RELEASE: 08/10/2001

CIA-RDP86-00513R000619920001-3

KAGAN, Yu. S.

APPROVED FOR RELEASE: 08/10/2001

CIA-RDP86-00513R000619920001-3"

"APPROVED FOR RELEASE: 08/10/2001

CIA-RDP86-00513R000619920001-3

APPROVED FOR RELEASE: 08/10/2001

CIA-RDP86-00513R000619920001-3"

"Experimental Data on Toxicology of Organophosphorus Insecticides
and the Therapy of Poisoning by Them"
paper presented at the First Conference on Neurotoxic Compounds,
Kazan, 2-10 Dec 56

GC: B-2, 84, 741

KAGAN, Yu.S.

Experimental data on therapy in cases poisoning by parathion, an insecticide containing organic phosphorus. *Farm. i toks.* 19 no.2: 49-52 Mr-Apr '56. (MLRA 9:7)

1. Toksikologicheskaya laboratoriya Kiyevskogo instituta gigiyeny truda i profzabolevaniy.

(PARATHION, poisoning

eff. of dphenylacetic acid propyl ester HCl & diethylaminoethyl ester of phenyl cyclopentacarbonic acid in animals (Rus))

(ACID ACID, derivatives,

diphenylacetic acid propyl ester, eff. on exper. parathion pois. (Rus))

(MUSCLE RELAXANTS, effects,

diethylaminoethyl ester of phenyl cyclopentacarbonic acid on exper. parathion pois. (Rus))

(POISONING, experimental,

parathion, eff. of diethylaminoethyl ester of phenyl cyclopentacarbonic acid & diphenylacetic acid propyl ester HCl (Rus))

"Modification of the Condition of the Olfactory Analyzer -- One of the Indicators of the Effect of Poisons and Dist on the Human Organism," by Yu. S. Kagan and F. N. Shleyfman, Voprosy Fiziologii Truda (Problems of the Physiology of Labor), Kiev 55, 149-155 (from Sovetskoye Meditsinskoye Referativnoye Obozreniye, Zdravookhraneniye, Gigiyena i Sanitariya, Istoriya Meditsiny, Moscow, No 19, 1956 abstract by O. Mogilevskaya, p 68

"The authors investigated the condition of the olfactory analyzer in persons engaged in work with sodium arsenite, granosan, and formalin, and in persons responsible for the storing and issue of these chemicals. The sensitivity of the olfactory analyzer was established by the determination of the threshold of its sensitivity to the odors of alcohol, acetic acid, and phenol. It was found that in persons working with sodium arsenite the curves of sensitivity to and differentiation between the odors of alcohol, acetic acid, and phenol were somewhat higher than the normal. A Dubrovskiy olfactometer which makes it possible to force into the nasal cavity a portion of air saturated with the vapors of a heated substance was used by the authors in their investigations. The pressure with which the air was forced into the nasal cavity was measured by means of an amonometer introduced into the olfactometer, and served as a criterion for the determination of the quantity of vapors introduced into the nasal cavity. Three indicators of the condition of the olfactory analyzer were determined: the threshold of olfactory sensitivity, the period of time required for its adaptation to the odor, and the period of time required for the restoration of the analyzer to the threshold of stimulation when loaded with vapors of the odoriferous substance.

S-100 13-22

"The investigations established: a rise in the threshold of olfactory sensitivity occurred in persons working with granozan; the adaptation of the analyzor to the odor was hastened; the period of time required for the restoration of the analyzor to the threshold of stimulation when loaded with vapors increased; and sharp modifications of the functions of the olfactory analyzor occurred in persons who had worked with granozan for prolonged periods of time (1-10 years).

"The authors came to the conclusion that the condition of the olfactory analyzor was modified by the action of poisons and dust, that short periods of work with some chemicals (sodium arsenite) caused a rise in its sensitivity, and that work for prolonged periods of time caused a diminution of its sensitivity. Modifications of the sensitivity were found in all persons under observation: 38 percent of them exhibited hypertrophic rhinitis and rhinopharyngitis. The authors recommend the use of the olfactory method for the early determination of the effect of poisons and dust on the human organism." (U)

54M.1322

"Experimental Data on the Reflex Mechanism of the Action of Mercuric and Organophosphorus Insectofungicides," by L. I. Medved', Yu. S. Kagan, and Ye. I. Spynu, VIII Vsesoyuznyy S'yezd Fiziologov, Biokhimikov, Farmakolov (VIII All-Union Session of Physiologists, Biochemists, and Pharmacologists) Moscow, 1955, 408-410 (from Sovetskoye Meditsinskoye Referativnoye Obozreniye, Normal'naya i Patologicheskaya Fiziologiya, Biokhimiya, Farmakologiya i Toksikologiya, No 27, 1956, abstract by F. Meyerson, pp 126-127)

"Experiments in which the conditioned reflex method was utilized established that the administration of toxic doses of thiophos and carbophos to animals produced an inhibitory reaction of the higher branches of the nervous system marked by a prolongation of the latent period of conditioned reflexes and the time necessary for their transmission, phase manifestations, their extinction, an absence of the natural conditioned reflex to food, and a diminution of the orientation reflex. These disturbances, which are reversible in character, may be regarded as being in the nature of a protective-defensive inhibition. This is confirmed by the positive results which are obtained with the use of soporific substances in the therapy of intoxications in animals by thiophos.

54M.1374

KAGAN, YU.S.

"The inhibition of the activity of cholinesterase and the accumulation of acetylcholine play an important role in the mechanism of the toxic action of organophosphorus compounds. The changes which take place in conditioned reflex activity and in the activity of the serum cholinesterase are parallel and form the early symptoms of intoxication. The authors concluded that the mercuric and organophosphorus compounds, being enzymic poisons with selective action on the thiol enzymes and cholinesterase, respectively, even in small doses cause changes in the functional condition of the nervous system. In a number of cases it was possible to establish a definite dependence of the changes in the nervous system on the degree of depression of the enzymic systems. (U)

SYM.1374

KAGAN, Yu. S. (Kiev Inst. Labor Hygiene and Occ. Diseases)

Insecticides

"Experimental Data on the Toxicology of Organophosphorus ~~compounds~~ and the
Therapy of Poisoning by Them" (Eksperimental'nyye dannyye po toksikologii
fosfororganicheskikh insektitsidov i terapii otravleniy imi)

Chemistry and Uses of Organophosphorus Compounds
(Khimiya i primeneniye fosfororganicheskikh soedineniy),
Trudy of First Conference, 8-10 December 1955, Kazan,
M. Published by Kazan Airl. AS USSR, 1957
384-396

Report discussed by K. S. Shadurskiy (Minsk State Med. Inst.) and M. Ya. Mikhel'son
(1st Leningrad Med. Inst. im. Acad. I. P. Pavlov)

"Labor Hygiene in Connection with the Spraying of Mercaptophos and Octamethyl on Cotton Plants," by Yu. S. Kagan, Candidate of Medical Sciences, Zashchita Rasteniy ot Vreditel'ey i Bolezney, Vol 2, No 3, May/Jun 57, pp 48-49

The author urges particular caution in the handling and spraying mercaptophos and octamethyl--pesticides widely utilized for the control of pests which attack cotton plants. Both are potent poisons and are readily absorbed through the skin, causing intoxications. The symptoms of intoxication are salivation, disturbed vision, muscular twitching, disturbed respiration, and occasionally, tremors and convulsions. Mercaptophos and octamethyl should be applied by trained personnel only. All must be provided with protective clothes and equipment. The safest method of applying the chemicals is from a plane. All personnel engaged in working with the chemicals should undergo periodical medical examinations to determine their blood cholinesterase activity. (U)

KAGAN, Yu. S.; MAKOVSKA, Ye. I.

Cerebral changes in experimental animals in poisoning from
mercaptophos insecticide, a phosphorus organic compound [with
summary in English]. *Fiziol. zhur.* [Ukr.] 3 no.3:77-84 '57.
(MIRA 10:8)

(PHOSPHORUS ORGANIC COMPOUNDS--TOXICOLOGY)
(BRAIN) (INSECTICIDES)

KAGAN, Yu.S., kand.med. nauk

Industrial hygiene during the use of systemic organic phosphate
insecticides [with summary in English]. Gg. i san. 22 no.7:15-21
Jl '57. (MIRA 10:10)

1. Iz Kiyevskogo instituta gigiyeny truda i professional'nykh
zabolevaniy.

(INSECTICIDES, poisoning,
phosphates causing occup. pois., prev. (Rus))
(PHOSPHATES, poisoning,
insecticides, prev. of occup. pois. (Rus))

KAGAN, Yu.S. (Kiyev)

Relation between the toxicity and chemical structure of certain
phosphorus organic insecticides. Gig.truda i prof. zab. 2 no.5
7-15 8-0 '58 (MIRA 11:11)

1. Institut gigiyeny truda i profzabolevaniy.
(PHOSPHORUS ORGANIC COMPOUNDS)
(INSECTICIDES)

KAGAN, Yu.S., kand. med. nauk (Kiyev); SPYBU, Ye.I., kand. med. nauk (Kiyev).

In the plenum of the committee on agricultural chemicals. Zashch.
rast. ot vred. i bol. 3 no.3:62 My-Je '58. (MIRA 11:6)
(Insecticides) (Fungicides)

. KAGAN, Yu.S., kand.med.nauk; KUMDIYEV, Yu.I., kand.med.nauk; TROTSENKO, M.A.,
kand.khim.nauk (Kiyev)

Safety measures in using phosphorus organic insecticides for
orchard spraying. Zashch. rast. ot vred. i bol. 3 no.4:29

J1-Ag '58.

(MIRA 11:9)

(Phosphorus organic compounds) (Chemicals--Safety measures)

KAGAN, Yu.S.

First All-Union Conference on The Hygiene and Toxicology of
Insecticides and Fungicides. Farm. i toks. 21 no.1:87-89 Jn-V '58.
(AGRICULTURAL CHEMICALS--TOXICOLOGY) (MIRA 11:4)

MEDVED', L.I., dotsent, red.; KRIVOGLAZ, B.A., prof., red.; KAGAN, Yu.S.,
kand.med.nauk, red.; SEREBRYANAYA, S.G., dotsent, red.;
TOSTANOVSKAYA, A.A., kand.med.nauk, red.; KUNDIYEV, Yu.I., kand.
med.nauk, red.; BURKATSKAYA, Ye.N., kand.med.nauk, red.; SPYNU,
Ye.I., kand.med.nauk, red.; NOVIKOV, Yu.V., red.; BUL'DIYEV,
N.A., tekhn.red.

[Hygiene, toxicology, and clinical aspects of new insecticides
and fungicides] Gigiena, toksikologiya i klinika novykh insekto-
fungitsidov; trudy. Pod obshchey red. L.I.Medvedia. Moskva, Gos.
izd-vo med.lit-ry Medgiz, 1959. 370 p. (MIRA 14:1)

1. Vsesoyuznaya nauchnaya konferentsiya po gigiyene i toksikologii
insektov i fungitsidov. 1st, Kiev, 1957. 2. Kiyevskiy institut
gigieny truda i profssabolevaniy (for Medved', Kagan, Kundiyeu,
Spynu). 3. Ukrainskiy nauchno-issledovatel'skiy institut pitaniya
(for Tostanovskaya).
(Insecticides) (Fungicides)

KAGAN, Yu. S.; SPYNU, Ye. I.; MAKOVSKAYA, Ye. I.; BRAKHNOVA, I. T.

"Experimental data on the toxicology of phosphoro-
organic insecticides."

report submitted at the 13th All-Union Congress of Hygienists,
Epidemiologists and Infectionists, 1959.

KAGAN, Yu. S.; SPYNU, Ye. I.; BURKATSKAYA, Ye. N.; BRANKHNOVA, I. T.;
MEDVED', L. I.

"Basic principles of hygienic evalation of insectofungicides."

report submitted at the 13th All-Union Congress of Hygienists, Epidemiologists
and Infectionists, 1959.

KAGAN, Yu.S. [Kahan, IU.S.]

Toxicology of O,O-diethyl- β -ethylmercaptoethylthiophosphate
(mercaptophos) and its isomers. Fiziol.zhur. [Ukr] 5 no.1:
110-118 JA-F '59. (MIRA 12:5)

1. Kiyevskiy nauchno-issledovatel'skiy institut gigiyeny
truda i profzabolevaniy.
(ETHYL THIOPHOSPHATE--TOXICOLOGY)

KAGAN, Yu. S., kand. med. nauk

Safety measures in handling phosphorus organic poisons. Zashch.
rast. ot vred. i bol. 5 no.5:45-46 My '60.
(MIRA 16:1)

(Agricultural chemicals—Safety measures)
(Phosphorus organic compounds)

MASTRIUKOVA, T.A.; GEFTER, Ye.L.; KAGAN, Yu.S.; PAYKIN, D.M.; SHABANOVA,
M.P.; GAMPER, N.M.; YEFIMOVA, L.F.; KACHENIK, M.I.

Phosphoroorganic insecticides. 3-Chlorobutenyl-2-phosphates and
thiophosphates. Zhur. ob. khim. 30 no.9:2813-2816 S '60.
(MIRA 13:9)

1. Institut elementoorganicheskikh soyedineniy Akademii nauk SSSR.
(Insecticides)

KAGAN, Yu.S. (Kiyev)

Reactivation of cholinesterase and experimental treatment mercaptophos poisoning. Pat.fiziol.i eksp.terap. 5 no.1163-65 Ja-F '61.

(MIRA 14:6)

1. Iz toksikologicheskoy laboratorii Kiyevskogo instituta gigiyeny truda i profzabolevaniy.

(CHOLINESTERASE) (SISTOX) (PYRUVALDEHYDE)

KAGAN, Yu.S.; IVANOVA, Z.V.

Anticholinesterase activity and toxicity of the sulfoxide and
sulfone of M-74. Farm.i toks. 24 no.2:220-223 Mr-Ap '61.
(MIRA 14:6)

1. Kiyevskiy institut gigiyeny truda i profzabolevaniy.
(PHOSPHATES) (CHOLINESTERASE)

MEDVED', L.I., doktor med. nauk, red.; BURKATSKAYA, Ye.N., kand.med. nauk, red.; VOYTENKO, G.A., kand. med. nauk, red.; KAGAN, Yu.S., red.; KRIVOGLAZ, B.A., prof., red.; KUNDIYEV, Yu.I., kand. med. nauk, red.; MAKOVSKAYA, Ye.I., doktor med. nauk, red.; SEREBRYANAYA, S.G., dots., red.; SPYNU, Ye.I., kand. med. nauk, red.; TOSTANOVSKAYA, A.A., kand. med. nauk, red.; TROTSENKO, M.A., kand. khim. nauk, red.; NOVIKOV, Yu.V., red.; CHULKOV, I.F., tekhn. red.

[Hygiene and toxicology of new pesticides and clinical aspects of poisoning; reports of the Second All-Union Scientific Conference of the Committee for the Study and Reglementation of Poisonous Chemicals of the Main State Sanitary Inspection of the U.S.S.R.] Gigiena i toksikologiya novykh pestitsidov i klinika otravlenii; doklady 2-1 Vsesoyuznoi nauchnoi konferentsii Komiteta po izucheniiu i reglamentatsii iadokhimikatov Glavnoi gosudarstvennoi sanitarnoi inspeksii SSSR. Pod obshchei red. L.I. Medvedia. Moskva, Medgiz, 1962. 478 p. (MIRA 16:4)

1. Vsesoyuznaya nauchnaya konferentsiya po gigiyene i toksikologii insektov i fungitsidov, 2d, 1962. (Continued on next card)

MEDVED', L.I.---(continued). Card 2.

2. Predsedatel' Komiteta gosudarstvennoy sanitarnoy inspektsii SSSR po izucheniyu i reglamentatsii yadokhimikatov (for, Medved'). 3. Kiyevskiy nauchno-issledovatel'skiy institut gigiyeny truda i profzabolevaniy (for Burkatskaya, Voytenko, Spynu, Kagan, Trotsenko). 4. Ukrainskiy nauchno-issledovatel'skiy institut pitaniya (for Serebryanaya).

(PESTICIDES---TOXICOLOGY)

A 17 G-24, 44

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Collection of complete papers presented at the 1959 Kazan Conference on Chemistry of Organophosphorus Compounds.

KAGAN, Yu.S., kand.med.nauk; TANK, L.I.

Brief news. Farm. 1 toks. 25 no.1:126-127 Ja-P '62. (MIRA 15:4)
(PHARMACOLCGY---CONGRESSES)

KAGAN, Yuriy Solomonovich, doktor med.nauk; KHAMIDULLIN, R.S.,
red.; PETROVA, N.K.; tekhn. red.

[Toxicity of phosphorus organic insecticides and work
hygiene in their use] Toksikologiya fosfororganicheskikh
insektitsidov i gigiena truda pri ikh primeneniis. Mo-
skva, Medgiz, 1963. 324 p. (MIRA 16:10)
(SPRAYING AND DUSTING IN AGRICULTURE--HYGIENIC ASPECTS)
(PHOSPHORUS ORGANIC COMPOUNDS--TOXICOLOGY)

REPORT L. I. and MAZAN, V. S.

"theoretical problems of the toxicology of pesticides."

Report presented at the 2nd All-Union Scientific Conference on the Hygiene and Toxicology of Pesticides, Ministry of Health USSR Committee on the Study and Regulation of New Poisonous Chemicals of the Main State Sanitary Inspection USSR and Kiev Institute of Labor Hygiene and occupational Diseases, Kiev 17-19 Oct 1962.
(Gigiyena i Sanitariya, No. 3, 1963 p. 104-105.)

Kiev Institute of Labor Hygiene and Occupational Diseases.

KAGAN, Yu.S., kand.med. nauk (Kiyev)

First aid in poisoning by toxic chemicals. Med. sestra 22
no.6:34-35 Je'63. (MIRA 16:9)
(CHEMICALS—PHYSIOLOGICAL EFFECT)
(FIRST AID IN ILLNESS AND INJURY)

KAGAN, Yu.S.

Second All-Union Scientific Conference on the Hygiene and Toxicology of Pesticides. Farmakol. toksik. 26 no.3:387-389 My-Je'63
(17:2)

ACCESSION NR: AP4012593

S/0021/64/000/002/0275/0278

AUTHOR: Yefimov, G. O.; Kagan, Yu. S.

TITLE: The toxicity of diesters of urethanphosphoric acids for insects and warm-blooded animals

SOURCE: AN UkrRSR. Dopovidi, no. 2, 1964, 275-278

TOPIC TAGS: organophosphorus compound, insecticide, organic phosphorus insecticide, anticholinesterase, toxicity

ABSTRACT: The present work dealt with organophosphorus compounds, the diesters of urethanphosphoric acids of the type ROOCNHP(O)(OR')_2 , where R and R' are alkyls. The dimethyl esters of isopropyl', methyl- and ethylurethanphosphoric acids are very toxic for the sugar-beet weevil, the first-mentioned being the most toxic. Preparations of diesters have high selective toxicity for certain insect species of the order Diptera (*Musca domestica*, *M. stabulans*, *Hylemia antiqua* and *Pegomia hyosciami*). The preparations were tested on rats and found to be practically harmless, manifesting a very weak anticholinesterase activity in vitro and not being transformed into active anticholinesterase agents in the animal organism. Orig. art. has 2 tables.

Cord 1/2

ACCESSION NR: AP4012593

ASSOCIATION: Insty*tut organichnoyi khimiyi AN UkrRSR(Institute of Organic Chemistry, AN UkrRSR)

SUBMITTED: 06May63

DATE ACQ: 03Mar64

ENCL: 00

SUB CODE: AM

NO REF SOV: 009

OTHER: 000

Card 2/2

SHABANOVA, M.P.; KAGAN, Yu.S.; PRILEZHAYEVA, Ye.N.; TSHMEAL, L.V.;
MAKHLINA, Ye.Ya.

Relationships between the structure of some esters of dialkyl-
dithiophosphoric acids and their toxicity for arthropods and
~~warm~~-blooded animals. Trudy VIZR no. 21 pt.1:114-125 '64.
(MIRA 18:12)

KAGAN, Yu.S.; KLISENKO, M.A.; PAN'SHINA, T.N.

Significance of detoxifying processes in the mechanism of selective toxicity of phosphorus organic insecticides. Vop.pit. 24 no.3:68-74 My-Je '65. (MIRA 18:12)

1. Kiyevskiy nauchno-issledovatel'skiy institut gigiyeny truda i professional'nykh zabolevaniy. Submitted July 23, 1964.

ACC NR: AP60290.3

SOURCE CODE: UR/0413/66/000/014/0024/0024

INVENTOR: Sanin, P. I.; Shepeleva, Ye. S.; Borodach, M. S.; Myannik, A. O.;
Kagan, Yu. S.; Gel'fer, A. P.; Paykin, D. M.; Gamper, N. M.

ORG: none

TITLE: Preparation of esters of phosphoric and thiophosphoric acids. Class 12,
No. 183751 [announced by Institute of Petrochemical Synthesis, AN SSSR (Institut
neftekhimicheskogo sinteza AN SSSR)]

SOURCE: Izobret prom obraz tov zn, no. 14, 1966, 24

TOPIC TAGS: insecticide, chloroalkyl phosphate, chloroalkyl thiophosphate, ester,
phosphoric acid

ABSTRACT: In the proposed method for the preparation of herbicides, the phos-
phoric and thiophosphoric esters of the general formula:



(where X and Y are O or S; n = 1, 4, 6, 8; and R is an alkyl) are
obtained by the reaction of trichloroalkyl alcohols with tetrachloro-
alkanes [sic]. [WA-50; CBE No. 11]

SUB CODE: 07/ SUBM DATE: 21Jun65/

Card 1/1

UDC: 547.26'118.07

KASAN, Z. S.

1. DOMAN, N. G. and KASAN, Z. S.
2. USSR (600)
4. Esters
7. Chromatographic determination of phosphoric esters by distribution on paper.
Biokhimiia 17 no. 6, 1952.

Translation - /m -

9. Monthly Lists of Russian Accessions, Library of Congress, March 1953, Unclassified.

KAGAN, Z. S.

USSR/Biology - Microbiology

Card 1/1 Pub. 22 -47/56

Authors : Lyubimov, V. I., and Kagan, Z. S.

Title : Urease and arginase in certain types of Azotobacter

Periodical : Dok. AN SSR 99/5, 845-848, Dec 11, 1954

Abstract : The presence of active arginase and urease in Azotobacter and their connection with the appearance of NH_3 in Azotobacter cultures are discussed. Comparative determination of urease activity in Micrococcus urease cells which reaches its maximum at pH 6.8, showed that Azotobacter cells contain more urease than uro-bacteria. The physiological importance of the urea splitting process in bacteria and the spreading of urease among the bacteria is explained. Twelve references: 6-USSR; 3-USA and 3-German (1926-1954). Tables; graph; drawing

Institution :

Presented by: Academician V. N. Shaposhnikov, October 5, 1954

RUSSIAN, A. S.

AID P - 1407

Subject : USSR/Medicine

Card 1/1 Pub. 37 - 4/23

Authors : Lyubimov, V. I., Kand. of Biol. Sci.
Kagan, Z. S., Junior Scientific Worker

Title : Adsorption of ferments by active silt.

Periodical : Gig. i san., 1, 16-18, Ja 1955

Abstract : A study of silt as a "catalyst" in the process of sewage purification, its fermentation properties and the increase in its activity due to the adsorption of ferments discharged by bacteria. 3 tables, 5 ref., 1923-1946.

Institution: Scientific Research Dept. of the Moscow Trust "MOSCHISTVOD" of the Administration of Water Supply and Sewage System of the Moscow Municipal Council of Workers' Deputies.

Submitted : My 10, 1954

is an intracellular enzyme and the permeability is regulated by the metabolic reactions.

- 8 -

Card 1/1

KHEHN, ZS

AUTHOR: Kagan, Z.S.

62-12-11/X

TITLE: The Synthesis of α -Keto Acids by Means of "Azlactone" of the N-Acyl- α -Amino- β -Alkyl(Aryl)-Acrylic Acid and a New Synthesis of α -Keto- β -Methyl-n. Valerianic Acid (Sintez α -ketokislót cherez azlaktóny N-atsil- α -amino- β -alkil (aril) akrilovoy kislóty i novyy sintez α -keto- β -metil-n. valerianovoy kislóty).

PERIODICAL: Izvestiya AN SSSR Otdeleniye Khimicheskikh Nauk, 1957, Nr 12, pp. 1486-1488 (USSR)

ABSTRACT: For the synthesis of the α -keto acids a number of general methods is suggested. Even though some α -keto acids, especially the aromatic ones, are usually obtained by condensation of the aldehydes with N-acyl glycines (with formation of "azlactones" of the N- α -amino- β -aryl acrylic acid and subsequent hydrolysis), this way of synthesizing is not to be considered a general method. In the present paper the condensation of aldehydes or ketones with acyl glycines and following hydrolysis of the "azlactones" of N-acyl- α -amino- β -alkyl (aryl) acrylic acid is described as another possible method of α -keto acids. The synthesis of α -ketoisovalerianic acid was repeated by the condensation of acetone with hyppuric acid (with following

Card 1/2

The Synthesis of α -Keto Acids by Means of "Azlactone" of the
the N-Acyl- α -Amino- β -Alkyl(Aryl)-Acrylic Acid and a New
Synthesis of α -Keto- β -Methyl-n. Valerianic Acid

62-12-11/20

hydrolysis of the "azlactone"). Furthermore, a new synthesis of
 α -keto- β -methyl-n. valerianic acid by condensation of the methyl
ethyl ketone with hippuric acid with following hydrolysis of the
"azlactone" of the N-benzoyl- α -amino- β -methyl- γ -ethylacrylic
acid was described. There are 25 references, 5 of which are Slavic.

ASSOCIATION: Biochemical Institute AN US3R imeni A.N. Bakh (Institut biokhimii
im. A.N.Bakha Akademii nauk SSSR).

SUBMITTED: July 7, 1957

AVAILABLE: Library of Congress

Card 2/2 1. α -Keto acids-Azlactone-Synthesis 2. α -Keto- β -Methyl-m-
Synthesis 3. Valerianic acid

LYUBIMOV, V.I., KAGAN, Z.S.

Dynamics of volatile organic acids produced during anaerobic decomposition of organic matter by micro-organisms in methane tanks [with summary in English]. Mikrobiologiya 27 no.4:484-488 Jl-Ag '58 (MIRA 11:9)

1. Lyuberetskaya laboratoriya nauchno-issledovatel'skogo otdela tretna "Mosochistvod."

(ACIDS, metabolism,

volatile organic acid form. by microorganisms in methane tanks (Rus))

(MICROORGANISMS, metabolism

synthesis of volatile organic acids by organic decomposition in methane tanks (Rus))

KRETOVICH, V.L.; KAGAN, Z.S.

Biosynthesis of valine and isoleucine in ripening wheat ears.
Biokhimiia 24 no.4:717-722 J1-Ag '59. (MIRA 12:11)

1. Institut biokhimii im. A.N.Bakha AN SSSR, Moskva.
(WHEAT) (VALINE) (ISOLEUCINE)

KAGAN, Z.S.; GALYAS, E.

"Paper chromatography." Reviewed by Z.S.Kagan, E.Galias. Biokhimiia
25 no.2:380-381 Mr-Ap '60. (MIRA 14:5)
(PAPER CHROMATOGRAPHY)

KAGAN, Z. S. (USSR)

"Biosynthesis of Valine and Isoleucine in Plants from Various
Nitrogen-free Precursors."

Report presented at the 5th International Biochemistry Congress,
Moscow, 10-16 Aug 1961

KAGAN, Z.S.

Synthesis of α, β -dihydroxy- β -methylvaleric acid. Izv.
AN SSSR Otd.khim.nauk no.2:317-320 F '62. (MIRA 15:2)

1. Institut biokhimii im. A.N.Bakha AN SSSR.
(Valeric acid)

KRETOVICH, V.L.; KAGAN, Z.S.

Biosynthesis of valine and its keto analogue in sunflower sprouts.
Dokl. AN SSSR 143 no.3:727-729 Mr '62. (MIRA 15:3)

1. Institut biokhimii im. A.N.Bakha AN SSSR. Predstavleno akademikom
A.I.Oparinym.

(VALINE)(PLANTS---METABOLISM)

KAGAN, Z.S.

$\beta\beta$ -dimethylacrylic acid as a precursor of amino acids in plants.
Biokhimiia 27 no.4:715-721 J1-Ag '62. (MIRA 15:11)

1. Institute of Biochemistry, Academy of Sciences of the U.S.S.R.,
Moscow.

(AMINO ACIDS)

(ACRYLIC ACID)

KAGAN, Z.S.; KRETOVICH, V.L.; CHEYSHNER, G.

Biosynthesis of isoleucine and its α , β -dihydroxy analog
in seedlings of various plants. Fiziol. rast. 10 no.4:458-
464. J1-Ag '63. (MIRA 16:8)

1. A.N. Bakh Institute of Biochemistry, Academy of Sciences,
U.S.S.R. and the Technological Institute of Food Industry,
Moscow.

LYUBIMOV, V.I.; KAGAN, Z.S.; VASILEYKO, M.A.; POPOVA, O.Ye.

Decomposition of volatile organic acids by microorganisms of
"active sludge". Mikrobiologiya 32 no.4:700-702 J1-Ag '63.
(MIRA 17:6)

1. Lyuberetskaya laboratoriya nauchno-issledovatel'skogo otdela
tresta "Mosochistvod.

KAGAN, Z.S.

Biosynthesis of valine, isoleucine, and leucine in micro-organisms
and plants. Usp.biol.khim. 5:61-99 '63. (MIRA 17:3)

KAGAN, Z.S.; CHOYSHNER, G.; KRETOVICH, V.L.

Biosynthesis of valine and isoleucine from their keto-
and dioxianalogs in flowering parasitic plants. Dokl.
AN SSSR 154 no.2:467-470 Ja'64. (MIRA 17:2)

1. Institut biokhimii im. A.N. Bakha AN SSSR i Tekhnologicheskiiy
institut pishchevoy promyshlennosti. 2. Chlen-korrespondent
AN SSSR (for Kretovich).

KAGAN, Z.S.; KRETOVICH, V.L.; POLYAKOV, V.A.; MISHCHENKO, A.V.

Effect of transamination inhibitors on the biosynthesis of
valine from its keto analog in plants. Dokl. AN SSSR 157
no.5:1231-1233 Ag '64. (MIRA 17:9)

1. Institut biokhimii im. A.N. Bakha AN SSSR i Tekhnologicheskii
institut pishchevoy promyshlennosti, Moskva. 2. Chlen-korres-
pondent AN SSSR (for Kretovich).

KRAUZE. Yezhiy KAGAN, Z.S.; KRETОВИЧ, V.I.

Two dehydrogenases of homoserine in bakers' yeast. Dokl. AN SSSR 158
no.5:1199-1201 0 '64. (MIRA 17:10)

1. Institut biokhimii im. A.N.Bakha AN SSSR i Tekhnologicheskiiy institut
pishchevoy promyshlennosti, Moskva. 2. Chlen-korrespondent AN SSSR (for
Kretovich).

KONTORSKAYA, G.K.; KAGAN, Z.S.; KRETOVICH, V.L.

Effect of light on the dynamics of ammonium assimilation by
wheat sprouts. Izv. AN SSSR Ser. biol. 30 no.1:141-144. Ja-F
'65. (MIRA 18:2)

1. Institut biokhimii im. A.N. Bakha AN SSSR i Tekhnologicheskij
institut pishchevoy promyshlennosti, Moskva.

KAGAN, L.S.; CHOYSHNER, G.

Synthesis and some properties of α,β -epoxy- β -methyl-n-valeric
(methylethylglycidic) acid. Izv. AN SSSR. Ser. khim. no.7:1222-
1225 '65. (MIRA 18:7)

1. Institut biokhimi i im. A.N.Bakha i Moskovskiy tekhnologicheskoy
institut pishchevoy promyshlennosti.

KRAUZE, Ye.; KAGAN, Z.S.; YAKOV'LEVA, V.I.; KRETOVICH, V.L.

Dehydrogenation of some amino acids by baker's yeast. *Biokhimiia* 30
no.2:334-343 Mr-Apr '65. (MIRA 18:7)

1. Institut biokhimi i imeni Bakha AN SSSR i Tekhnologicheskii institut
pishchevoy promyshlennosti, Moskva.

KAGAN, Z.S.; CHOYSHNER, G.; KRETOVICH, V.L.

Biosynthesis of valine and isoleucine in wheat sprouts:
dihydroxy acid dehydratase. Biokhimiia 29 no.4:624-635
Jl. Ag '64. (MIRA 18:6)

1. Institut biokhimi i imeni Bakha AN SSSR i Tekhnologicheskii
institut pishchevoy promyshlennosti, Moskva.

KUGEL, A.A.: MAKHINA, A.A.

Valine and isoleucine biosynthesis from beta-alanine and pyruvate in the leaves and roots of corn. Dokl. AN SSSR 17-187 (1966) 1111

1. Institut biokhimi im. A.N.Bakha AN SSSR i Leningrad
tekhnologicheskii institut prikladnykh tekhnologii
February 12, 1965.

KAGAN-BARSKIY, L.Sh., inzh.

Optimum control of the working conditions of contact clarifiers.
Vod.1 san. tekhn. no.10:21-22 O '62. (MIRA 15:12)
(Water--Purification)

KAGAN-LUZGINA, M.I.

[Work hygiene in the building materials industry; practical information
of health service work] Gigiena truda v promyshlennosti stroitel'nykh
materialov; metodicheskie materialy dlia sanitarnoprosvetitel'noy
raboty. Moskva, 1956. 78 p. (MLRA 10:3)
(BUILDING MATERIALS INDUSTRY--HYGIENIC ASPECTS)

KAGANAS, M. A.: Master Tech Sci (diss) -- "Reinforced-concrete and concrete designs and parts prepared under winter conditions, by the method of thermal activation of settling with internal canals". Kaunas, 1958. 22 pp, 150 copies (KL, No 5, 1959, 149)

KAGANE, G.

RUSSIA/General Problems of Pathology - Tumors. Russian Tumors. U.

Abstr Jour : Ref Zhur - Biol., No 2, 1959, 0009

Author : Kostan, G., Sperantse, G., Karmali, M., Lasev, M.,
Kuznetsov, G., Markovskiy, D.

Instit :
Title : Research on Certain Serial Anti-Hyaluronidases in Skin
Cancer.

Orig Pub : Zhurnal. med. biokhimii, 1957, 1, No 2, 61-66

Abstract : No abstract.

Card 1/1

- 51 -

18.5100

33809
S/137/62/000/001/077/237
A060/A101

AUTHORS: Kagane, L. Ya., Barsukov, V. V.

TITLE: Production of sheet cast-iron

PERIODICAL: Referativnyy zhurnal, Metallurgiya, no. 1, 1962, 4, abstract 1D19
(V sb. "Polucheniye izdeliy iz zhidk. met. s uskoren. kristallizatsiyey". Moskva-Kiyev, Mashgiz, 1961, 164 - 168)

TEXT: Crude iron sheet 0.7 - 1.5 mm thick obtained by forming from molten metal, possesses after rolling satisfactory mechanical characteristics (σ_b 30 - 32 kg/mm², δ 8 - 10%) and may be utilized in machine construction and also for a number of articles of domestic use instead of steel sheet. The TsKTB has worked out the technological processes, the designs of installations, and the technological schedules for crude iron sheet production. Some variants of the organization of crude-iron sheet production are cited. In the production of crude-iron sheet amounting to 25,000 tons per annum, the molten metal at 1,420°C is obtained from a cupola-furnace with productivity of 8 tons per hour. The molten metal is held-over in the ladle to reduce non-metallic impurities. At a temperature of 1,260 - 1,280°C the pouring of the metal in crystallizer rolls begins. The

Card 1/2

33809

S/137/62/000/001/077/237

AO60/A101

Production of sheet cast-iron

strip being formed is cut by rotating cutters into separate sheets which are stacked into stacks. Five-ten stacks are supplied for heat-treatment - graphitizing annealing. Then the crude-iron sheets undergo trimming and are directed to a cam press for the stamping of articles. Variants for the production of reduced crude-iron sheet with improved mechanical characteristics and for the manufacture of crude-iron sheet in rolls are also worked out. There are considerable prospects for the mastery of production of sheet from molten steel. x

G. Grigoryan

[Abstracter's note: Complete translation.]

Card 2/2

KHOMYANOV, A.M.; GAZETOV, A.I.; GYVONIKHA, V.V.; PAUKA, M.I.; KALININ, S.M.; FEL'DMAN, K.I.; LAMIN, V.A.; KAGANER, A.I.; GAZETOV, A.M.; GORCHAKOV, I.

Brief information. Sov.med. 26 no.1145-147 Ap 196.

(MIRA 18:6)

1. Fakul'tetskaya khirurgicheskaya klinika Gmnyabnitskogo meditsinskogo instituta (for Kromyakov, Gorchakov).
2. Infants'koy rebenkiy Volgo, razdelnyy meditsinskoy instituta (for Gyl'dman).
3. Khustskaya rebenkaya bol'nitsa Khirurgicheskoy bol'nitsy (for Patala).
4. Rebenkaya bol'nitsa Khirurgicheskoy bol'nitsy (for Gyl'dman).
5. Khirurgicheskaya detskoy vozrastu Khirurgicheskoy meditsinskoy instituta (for Fel'dman).
6. Gosptal'naya terapevticheskaya klinika i klinika otorinolaringologicheskoy bol'nitsy Otorinolaringologicheskoy meditsinskoy instituta (for Lamin).
7. Rebenkaya bol'nitsa obshchaya klinicheskaya bol'nitsa (for Kaganer).
8. Khirurgicheskoye otdeleniye Tsentral'noy klinicheskoy bol'nitsy imeni Sosnitsko Ministerstva puty soobshcheniya (for Gazetov).
9. Kafedra organizatsii zdravookhraneniya i istorii meditsiny Perstovskoy meditsinskoy instituta (for Gorchakov).

RYABKOVA, Ye.G.; KAGANER, A.I.; SELIVANOVA, I.G.

Primary clinical manifestations of lesions of the nervous system
in rheumatic fever. Vop. psikh. nevr. no.10:50-55 '64.

(MIRA 18:12)

1. Kafedra nervnykh bolezney (nachal'nik - prof. A.G.Fanov)
Voyenno-meditsinskoy ordena Lenina akademii imeni S.M.Kirova i
Leningradskaya oblastnaya klinicheskaya bol'nitsa (glavnyy
vrach - V.N.Sukhobskiy).

KAGANER, Y.

They increase their knowledge in this way. Prof.-tekh.obr. 13 no.9:28
8 '56. (MLRA 9:10)

1. Zamestitel' direktora po uchebno-proizvodstvennoy chasti.
(Farm mechanization--Study and teaching)

KAGANER, F.

For academic instruction. Prof.-tekh.obr. 17 no.5:24
My '60. (MIRA 13:7)

1. Zamestitel' direktora remeslennogo uchilishcha po
mekhanizatsii sel'skogo khozyaystva No.13 (g.Nezhin).
(Farm mechanization--Audio-visual aids)

S/065/62/000/011/001/006
E075/E436

AUTHORS: Pal'chikov, G.F., Mezhlumova, A.I., Krichko, A.A.,
Kaganer, G.S., Stepuro, S.I., Brovenko, A.V.

TITLE: Extraction of aromatic hydrocarbons from middle
petroleum fractions and catalytic gas oils with
aqueous pyridine

PERIODICAL: Khimiya i tekhnologiya topliv i masel, no.11, 1962,
19-25

TEXT: Following the laboratory work reported previously
(Khim. i tekhnol. topliv i masel, no.4, 1961) trial batches of
aromatic extracts (400 to 500 kg) were obtained on a pilot plant
scale from a catalytic gas oil and kerosene - gas oil fractions
from Anastasiyevka crude. The extraction was carried out using
aqueous solution of technical pyridine (boiling point range
114 to 134°C). The feed saturated with pyridine vapour meets
the pyridine solution in the extractor. Countercurrent
extraction takes place, the raffinate and the extract solutions
leaving the opposite ends of the extractor. For the extraction
of the kerosene - gas oil fraction the raffinate contained 30% by
Card 1/2

Extraction of aromatic ...

S/065/62/000/011/001/006
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volume of pyridine (water free) and the extract solution - 80.7% pyridine, 10% water and 9.3% extract. The extraction was conducted at 15°C. The extract constituted 32 to 35% of the feed and contained about 80% aromatic hydrocarbons. The extract with 50% of the aromatic hydrocarbons was obtained with the yield of 70%. The extracts were subjected to high temperature hydrogenation. For the extract from the catalytic gas oils the yield of naphthalene obtained by the hydrogenation was 30%. For the kerosene - gas oil fraction about 20% yield of naphthalene was obtained and 40% of a solvent containing 95% of aromatic hydrocarbons. There are 1 figure and 7 tables.

ASSOCIATION: SNKh Checheno-Ingushsk. ASSR

Card 2/2

L 30247-66 EWT(m)/T WE

ACC NR: AP6013820

(A)

SOURCE CODE: UR/0318/65/000/012/0003/0005

AUTHOR: Pal'chikov, G. F.; Mezhlumova, A. I.; Kaganer, G. S.; Stepuro, S. I.;
Krichko, A. A.; Titova, T. A.

42

38

B

ORG: Grozneftekhimzavody Association (Ob'yedineniya Grozneftekhimzavody); Institute of Mineral Fuels, AN SSSR (Institut goryuchikh iskopayemykh, AN SSSR)

TITLE: Processing of catalytic gas oils by extraction with pyridine and hydrogenation

SOURCE: Neftepererabotka i neftekhimiya, no. 12, 1965, 3-5

TOPIC TAGS: pyridine, solvent extraction, gas oil fraction, hydrogenation, naphthalene, petroleum product, gasoline

ABSTRACT: The paper describes the results of an extractive separation of catalytic gas oils from low-sulfur and sulfur feed stock by means of wet pyridine and the results of the hydrogenation of the extracts. The extractive separation of the gas oils was carried out in a continuous unit with a vertical countercurrent extractor provided with a pulsed packing of perforated metal discs. The output of the unit was 1 liter/hr. The degree of separation of aromatic hydrocarbons from gas oil was 70-75%; for bicyclic hydrocarbons, 95%. The extract from the low-sulfur gas oil was used directly as the feed stock for the hydrogenation. It is concluded that catalytic gas oils produced by refineries in the southern and eastern regions of the Soviet Union can be

UDC: 665.5.521.4.66.061.5

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CA

The distribution of pores according to size in porous bodies. I. P. Ishkin and M. O. Kanner (Inst. Oxygen Mech. Eng., Moscow). *Zhur. Prikl. Khim.* 24, 943-52 (1980).--The conditions for motion of 3 systems (more or less insol. liquids or gas and liquid) through a porous medium were established. The system gas/liquid was studied experimentally and theoretically. The method for detg. the distribution of pores according to size in porous bodies was improved; the pressure and rate of flow of gas through a porous body immersed in a liquid were measured. The method was useful for the construction of the structural curves for cemented porous bodies with a pore radius of from 10 to several hundred microns. The distribution according to size agrees with the Maxwell distribution equation.

Paul W. Howerton

KACHAROV, N. G. (ENGR)

Dissertation: "Investigation of the Thermodynamic Properties of Air and Nitrogen at Low Temperatures and High Pressures." Cand Tech Sci, Moscow Order of Lenin Power Engineering Inst imeni V. M. Molotov, 4 Jun 54. Vechernyaya Moskva, Moscow, 26 May 54.

SO: SUM 284, 26 Nov 1954

SUBJECT USSR / PHYSICS CARD 1 / 2 PA - 1562
 AUTHOR ISKIN, I.P., KAGANER, M.G.
 TITLE The Investigation of the Thermodynamic Properties of Air and Nitrogen at Low Temperatures under Pressure.
 I. The Determination of the Isothermal Throttle Effect of Air and Nitrogen.
 PERIODICAL Zurn.techn.fis, 26, fasc. 10, 2329-2337 (1956)
 Issued: 11 / 1956

The present work aims at determining experimental data concerning these thermodynamic properties and the construction of new and accurate state diagrams of these gases with the help of the isothermal throttle effect. On this occasion the lateral heat transfer of the gas to the surrounding medium is practically fully eliminated and at a low gas consumption and a smaller apparatus greater accuracy is obtained, and, besides, computation of enthalpy is made easier.

At first the experimental order is described. Together with the determination of temperature in the kryostat, the flow of the gas to be investigated is sent through the calorimeter. Pressure and gas consumption as well as pressure drop were controlled by means of regulating valves (at the in- and output of the calorimeter), and by means of a throttle valve.

Experimental results are shown in tables. The isothermal throttle effect of air and nitrogen was measured within the temperature range of from $+30^{\circ}$ to -183° C and at pressures of from 1,5 to 50 atm. According to experimental data the iso-

...the equation of state of gas...

...thermal expansion, characterizes the behavior of real gas better than did their other experimentally data but not yet. The accuracy of several well-known equations of state of gas: van der Waals, Berthelot, Dieterici, Beattie-Bridgman, Virial, and Benedict are evaluated and the effect of the coefficient in the equation of state is...

KAGANER, M.G.

AUTHOR: Kaganer, M.G.

120-5-34/35

TITLE: On the Measurement of Vacuum Using a Resistance Manometer
(Pirani Gauge-transl.) Ob izmerenii vakuuma manometrom
soprotivleniya)

PERIODICAL: Priory i Tekhnika Eksperimenta, 1957, No.5,
pp. 124-125 (USSR).

ABSTRACT: Resistance manometers are usually used in the region 1 to 10^{-3} mmHg (Refs. 1 and 2). At lower pressures ionization manometers with hot and cold cathodes are used more frequently. In many cases, particularly in laboratory practice, the emission and absorption of gases in the system cannot be allowed. For this reason, the resistance manometer is sometimes used down to 10^{-5} mmHg (Refs. 1, 3 and 4). Measurements are carried out by a bridge scheme using three different methods. In some work on adsorption at low pressures, the author used the resistance manometer together with a potentiometric scheme to measure pressures (Fig.1). The manometer 6 consists of a glass cylinder 32 mm in diameter, containing a platinum thread 0.07 mm in dia., having a resistance of 13.5 Ω at 0 °C. The potential difference between the ends of the thread is measured by the potentiometer 1. The constancy of the working current is maintained by means of two resistance boxes 4, connected in parallel and is

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120-5-34/35

On the Measurement of Vacuum Using a Resistance Manometer.

The small deviations of the points from the calibration curve are to a large extent due to errors of the compression manometer. The linear dependence of the resistance of the thread on pressure is observed only below 5×10^{-4} mmHg. In this region, the sensitivity of the scheme is about 0.06 mV or 24 divisions

of the galvanometer per 10^{-5} mmHg. The sensitivity can be increased by using a low resistance potentiometer instead of a high resistance one. A comparison of the calibrations at 25° and 30 °C shows that the difference of the thread resistances gradually increased from 0.17 Ω at 10^{-5} to 0.22 Ω at 1 mmHg, while the absolute magnitude of resistance decreases to one-third. The magnitude of the ratio $\Delta R_T/R$ does not appear

to be constant and hence the use of a compensator does not lead to such reliable results as the thermostating of the manometer. As a result of measurements at liquid nitrogen temperatures, it was found that if the temperature of the walls is lowered from 25 ° to -196 °C, the sensitivity increases to 0.18 mV per

10^{-5} mmHg in a high vacuum. This corresponds to an increase in the sensitivity of the manometer:

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$$\left(\frac{1}{R_0} \cdot \frac{dR}{dP} \right)$$

KAGANER, M.G., kand. tekhn. nauk; ROGOVAYA, I.A., kand. tekhn. nauk.

Determining the amount of gas in bottles. Kislorod 10 no.3:22-24

'57.

(MIRA 10:11)

(Gases, Compressed)

AUTHOR: Kaganer, M. G.

20-2-25/50

TITLE: A Method for Determining the Specific Surface From the Adsorption of Gases in the Monomolecular Region (Metod raspredeleniya udel'noy poverkhnosti po adsorbtsii gazov v monomolekulyarnoy oblasti)

PERIODICAL: Doklady AN SSSR, 1957, Vol. 116, Nr 2, pp. 251 - 254 (USSR)

ABSTRACT: The author first maintains that the methods hitherto employed for this purpose result in unreliable values in the case of finely porous adsorbents, especially in the case of many active coals. A new method, which is independent of methods hitherto employed, can be based upon measurements carried out in the domain of monomolecular adsorption. The author determined the adsorption of nitrogen (at 77,4°K and p/p_s from $1 \cdot 10^{-8}$ to 0,5) by means of samples of silica gel and aluminum oxide by the volume method. At pressures of less than $1 \cdot 10^{-3}$ mm torr equilibrium was attained after 15 to 25 hours. The isotherms of adsorption are shown in form of a diagram. At low values of the degree of covering of the surface Θ the inhomogeneity of the surface exercises considerable influence on the shape of isotherms. The most active points are usually covered at

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A Method for Determining the Specific Surface From the Adsorption of Gases in the Monomolecular Region

low values of p/p_s . If Θ is of the order of some tenths, only the relatively homogeneous areals of the surface remain uncovered. This is also indicated by the approximately constant adsorption heat. Measurements in this domain of monomolecular adsorption ($\Theta > 0,2 - 0,3$) are suited for determining the surface. The study of the experimental data concerning adsorption in the case of small Θ , which were found here and elsewhere, led the author to the conclusion that in the domain concerned all adsorbents satisfy an equation mentioned here. The deviations of experimental points from the straight line at high values of p/p_s increase with an increase of the size of the pores of the adsorbent. The here discussed deliberations of the author are fully confirmed by the experimental data concerning the adsorption of nitrogen at low pressures found by him and by other authors. A diagram shows the isotherms of the adsorption of nitrogen at $77 - 78^\circ \text{K}$ by 8 different adsorbents. Filling up of the second and of the following layers probably begin after the first layer has been filled up to from 75 to 90%. The values of the specific surface obtained by various methods are compared in a table. The equation by M. M. Dubinin and L. V. Radushkevich (ref. 4) describes the adsorption of nitrogen on various

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5(1)
AUTHORS: Miroslavskaya, Yu. A., Engineer, Kaganer, M. G., Candidate
of Technical Sciences, Glebova, L. I., Engineer

TITLE: Gasifier of Liquid Oxygen With Vacuum Insulation (Gazifikator
zhidkogo kisloroda s vakuumnoy izolyatsiyey)

PERIODICAL: Kislород, 1958, Nr 6, pp 8 - 15 (USSR)

ABSTRACT: The gasifier mentioned mainly consists of two concentric
balloons and a vacuum between them. The inner balloon has a
capacity of 28 l. A funnel leads to it, with a tube for the
supply of liquid oxygen, which also serves the purpose of
discharging the surplus vapor, and a U-shaped feed tube for
vaporous oxygen from the receivers for the first production
of overpressure. The inner liquid oxygen feed tube also serves
the purpose of discharging the oxygen into the vaporizer. An
absorbing device is fastened to the outer wall of the inner
balloon to absorb any oxygen that might leak through tiny
cracks or pores. The whole device and the inner balloon
separately were checked by means of a leakage detecting in-
strument of the PTI-4A type. More leakage was found to come
from the inner container, which made the application of an

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Gasifier of Liquid Oxygen With Vacuum Insulation

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absorber necessary. Investigations were carried out of the effectiveness of several absorbing materials depending on temperature and pressure, and silica gel KSM (GOST 3956-54) proved to be the most suitable. A thermal calculation was carried out of the whole device. The entire heat conductivity of the device Q leading to an additional vaporization of the liquid oxygen in the inner balloon, consists of:

Q_1 of the heat conductivity of residual gases in the vacuum; this was calculated according to reference 6 taking into account the device to be $Q_1 = 0.19$ kcal/hour, from Q'_2 and Q''_2 ,

the heat conductivity of the metallic parts of the balloon and of the outer parts of the supply funnel.

Q''_2 was calculated to be 0.77 kcal/hour.

Q'_2 for the discharge and supply tube of liquid oxygen was calculated according to Hegg's formula (Ref 7); $Q'_2 = 0.34$ kcal/hour;

Q_3 the heat radiation from the outer to the inner balloon

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Gasifier of Liquid Oxygen With Vacuum Insulation

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through the funnel 3.56 kcal/hour.

$Q = Q_1 + Q_2' + Q_2'' + Q_3$ averages 4.62 kcal/hour within the temperature range of $+20^{\circ}$ and -5° .

Practical experience has shown that 80-100 g of liquid oxygen vaporize, corresponding to a heat flow of 4.1-5.1 kcal/hour, which is in good agreement with the calculated value of 4.62 kcal/hour. It was found that heat radiation is the main cause of losses. There are 9 figures, 2 tables, and 8 references, 6 of which are Soviet.

The gasifier was constructed by VNIINIMASH and has already been introduced in production.

Card 3/3

AUTHORS: Kaganer, M. G., Petrovskiy, Yu. V., SOV/67-11-5-15/18
Afanas'yev, S. G., Candidates of Technical Sciences,
Trokhin, A. A., Engineer

TITLE: From Foreign Journals (Po stranitsam zhurnalov)

PERIODICAL: Kislodod, 1958, Vol 11, Nr 5, pp 59-64 (USSR)

ABSTRACT: Under this title brief abstracts of articles published
in foreign journals are presented. There are 14 articles
dealing with the oxygen industry and its border fields,
9 American, 1 English, 1 German, 2 French and 1 Polish article.
There are 3 figures.

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